WEEK

Perogram 7: Would a perogram that olimpurbrates boundling of energhious in Enhoutement bound. Create a base dans called "Fature" & derived clous " son' which entends the base class. In Fathur class, implement a constructor which takes the arge & throws the exception Wrong Age() when input eige 20. In son claus, emplement a construction that cares both bather & Son's age & twows an englemention it son's age is > = bather's age.

#comport java.util. +;

class wrong Age entends Enception f storing msg;

Staining prototion wording Age (Storing mag)

F this. msg = msg;

Apontrossagosta System.ord.prinkle. (\* msg);

twows wrong Age Class Father

{ intage; Fatur (int eige)

if (age < 0)

twow new wrong Age ("Age can't de negative"); (o moderny) relat

be printed " brusphices

Totals factors bows

this age = age;

int getAge()

3 Juhum egg;

class son extants Father throws wrong Age 9 int sage; Son ( int fage, int sage)

? super (fage);

flage <= Songe)

Throw new warnightel "forther's age can't the was throw

gon's age "); Has this sage = sage; int get SAge () zuhvern sage; class Agriots public statec void main (storing eags[7) Eanner St. = new Sconner (System.in); Briai Systement printly l'Enter age of fature & son'); be se. nenthate); s=sc-nentitute); paragra source Fatur (6); and root Fortur Giobji = new Son Obje z hun son (6,8); cately (Esseption e) Suptemoutoprinker la Enception & " \*\* \*\* \*\* \*\* \*\*\* } output: 1) Enter age of tatus & son: 50 18

44

in Enka age of father and son: 18 50 Fortur age comnot be less them son's age Enception tusowa (Mi) Enker arge of bakur and son: -12 20 Age comnot le negative

Algarithm:-

Breepti on

step 1: Start wer-elipined
step 2: create clark Enception Woward Role which prints
the conception turown by Festive Vir son clarses
the conception turown by Festive Vir son clarses
they 3: create clars Fastur which imputs fugle and checks
step 3: create clars Fastur which imputs fugle and checks

the of age entered is negative & throws emphisis Step 4: create clars. Son which entends the Foother clars, this takes imputs bage & sage and checks of fage is <= sage and throws

enpertion.

In main Mars we wante objects for to Fakur En son and passes was inputs for ages (A try-catch block books for any exception thrown).

step 6. stop.

\* Father & Son Classes have a troows exception in their & declara cholograpion (they might throw user clefind Enception: Warning Age)

les Butomaphel Exception o

```
Enter ages of father and son:
50
18
Name: Aditi C
USN: 1BM22CS014
C:\Users\BMSCE\Desktop\014>javac Demo.java
C:\Users\BMSCE\Desktop\014>java Demo
Enter ages of father and son:
18
50
Father age cannot be less than Son's age
Exception
Name: Aditi C
USN: 1BM22CS014
C:\Users\BMSCE\Desktop\014>javac Demo.java
C:\Users\BMSCE\Desktop\014>java Demo
Enter ages of father and son:
-12
20
Age can't be negative
Exception
Name: Aditi C
USN: 1BM22CS014
```

Program 8: WAP which creates 2 thouads, one thread displaying "Bras college of Engineering" once every ten seconds & emother displaying "CSE", once every two seconds. Dimport Jowa. util. \*; class Navothread Emplements Runnable 2 storing name; Abricad t; New Tread (Storing n) = yes of way name = n; t = new Threadl this, name ); & t-Startes; cheeps of factor is a public void rum ()

{ for lint i = 0; i \ 5; i + 1), Zil (nemezz" one"). Notos-prod (1) 2000 & System. out. printly (" BMS allege of Engéneoring"); Wread - Shep (2000); eatel (Far Intorrupte el Exception e) Egskmouls printi(" Interrupted"), Explanato printly (" Burs cottage of Engineering"); else if lume = = "two") & System. out. printly (\* est"); Thread step (2000); certch (Interrupted Exception e)
9 System.out.porinthn ("Interrupted"). 2

System-ent privates clars Denno ? | public static void mein (Storing enger]) NewThread Obj: = new NewThread ("One"); NewThread Obj2 = new NewThread ("two"); object join(); Object. joul); catch (Interrupted Exception e) & System out Printle (" Main Heread , interrupted"); 3 3 1 output: collège of Engineering CSE CSB ese CSB CSE BMg college of Engineering sing college of Engineering BMs college of Engineering BMS willed of Engineering

Algorithm:

Alaporithm: sleut Step 1: create a clars NewThread that Emplements the step 2: Runnable interface, and takes name of the thread curing starters, the stoort () method suitiates the run () Step 4: in the run method: for i=0 to 4 do of motorials if thread name z " one") output "BMS collège of Engineering" thread Sleeps for 10 seconds else of theread name = "two") eutput "ess" thoread steeps for 2 seconds

endail

Step 5 ; stop

\* A tory and tatch block in an interrupted the enception main function catches

EMS Loguest of Engineering

college of Engineering

college of Engineering

ally of Engineering

EME align of Engineering

BMS

16.02.24

```
C:\Users\BMSCE\Desktop\014>javac Test.java
C:\Users\BMSCE\Desktop\014>java Test
BMS Ccollege of engineering
CSE
CSE
CSE
CSE
CSE
BMS Ccollege of engineering
BMS Ccollege of engineering
BMS Ccollege of engineering
BMS Ccollege of engineering
Name: Aditi C
```

USN: 1BM22CS014